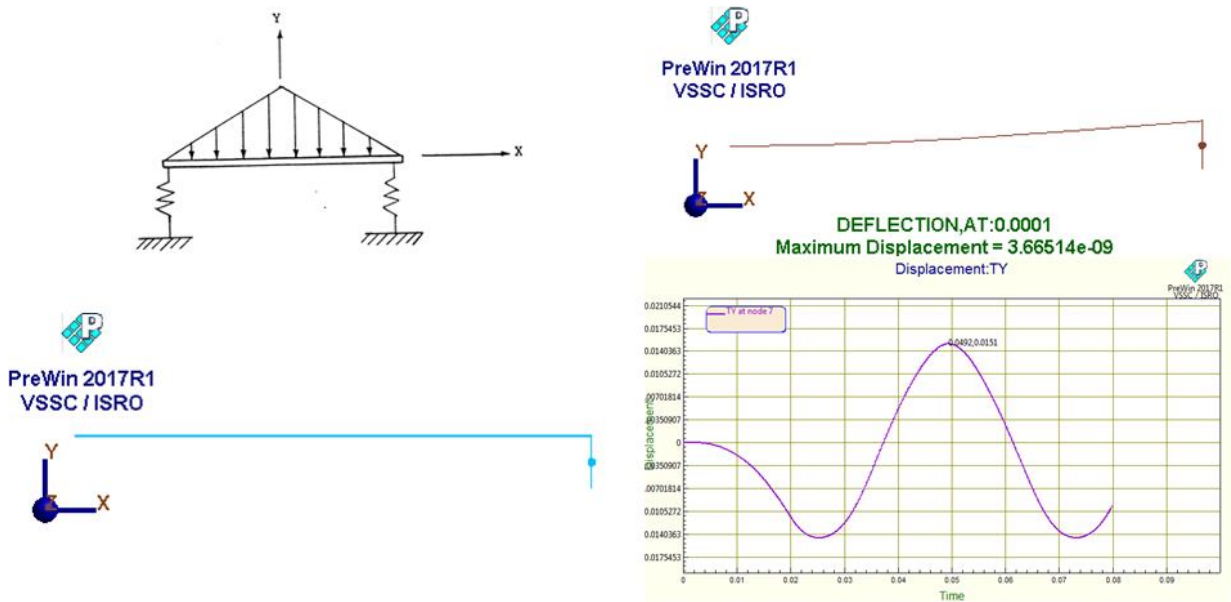


Transient response of a beam subjected to distributed load



Boundary Condition :	$U_x, U_z, R_x, R_y, R_z = 0$ at node 1. $U_x, U_z, R_x, R_y = 0$ at node 2, 3, 4, 5, and node 6 all 6 DOF are arrested				
Material Property :	$E_x = 3.0 \times 10^7 \text{ psi}$, $\nu = 0.3$, $\rho = 0.000728 \text{ lb-sec}^2/\text{in}^4$				
Element Type :	2-D beam element, 2-D translational spring element				
Geometry :	$A = 1.3333 \text{ in}^2$, $I_{ZZ} = 800.6 \text{ in}^4$				
Load :	Time (Sec.)	0	0.02	0.0201	0.04
	Load (N)	0	1	0	0
Finite element statistics	Number of elements	5		Number of nodes	6
				Degrees of freedom	9

Output parameters		Theoretical	FEAST ^{SMT}	NISA2 [®]
Frequency (rad/sec)	Mode 1	20.86	20.92	20.87
	Mode 2	82.28	84.56	88.47
Time of Maximum Response (sec)		0.049	0.049	0.049
Maximum Displacement (in)		0.015	0.015	0.015